



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Andrew R. Osborn  
SERIAL NO.: 09/982,601  
FILED: October 18, 2001  
FOR: METHOD OF COMMUNICATING ACROSS AN  
OPERATING SYSTEM

GROUP ART UNIT: 2662  
EXAMINER: To Be Assigned

ATTORNEY DOCKET NO.: 65,270-005

**SUBSTITUTE DECLARATION IN SUPPORT OF PETITION  
TO MAKE SPECIAL UNDER 37 C.F.R. § 1.102(d)**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

**SUBSTITUTE DECLARATION OF SAMUEL J. HAIDLE**

Samuel J. Haidle declares as follows:

1. I am a member of the law firm of Howard & Howard Attorneys, P.C. and the attorney for the Applicant in the above-identified Patent Application. I am a member of the Bar of the State of Michigan and a registered patent attorney, with Registration No. 42,619. I make this Declaration in support of Applicant's Petition To Make Special in the above-identified Patent Application.

2. The subject matter of the above-identified Patent Application relates to a method of communicating across an operating system using a plurality of processes and a plurality of memory sources disposed within one or more processors. The method includes the steps of detecting an event within the system and extracting an initial process address and an initial data address from one of the memory sources to determine a location of an initial process and initial data. Once the operating system knows which process is to be executed and which data to use, the operating system executes executable code of the initial process located at the initial process address. Next, a second process address and a second data address are extracted from one of the

memory sources to determine a location of second data to use in a second process prior to the completion of the execution of the executable code of the initial process.

3. I have made a careful and thorough search of the prior art before the filing of the subject patent Application in the United States. The following patents were uncovered in that search:

4,276,594	5,953,340
4,757,497	6,012,101
5,276,789	6,016,464
5,296,936	6,021,495
5,557,778	6,052,380
5,594,870	6,061,685
5,596,723	6,067,585
5,617,418	6,067,595
5,784,557	
5,802,391	
5,933,607	

4. In addition, the subject application was filed under the Patent Cooperation Treaty ("PCT") and the International Searching Authority of the PCT conducted their own independent search. The International Searching Authority uncovered the following U.S. Patents:

5,991,820	5,737,605
5,386,566	

5. During the pre-filing pre-examination search, various U.S. classes and subclasses were searched as set forth below:

Classification	Sub-Class
370	445; 446; 400; 395; 405; 484; 401; 468
702	79
709	250-253; 220
713	201
710	2; 11; 129
345	440
365	230.05
711	149; 150; 118
707	10; 203

As stated above, a search was also made by the International Searching Authority of the PCT. It is therefore submitted that the requirement of a pre-examination search under MPEP 708.02 (VIII)(C) is satisfied.

6. The closest prior art references to the subject Application, as uncovered by Applicant, are United States Patent Nos. 4,276,594 (the '594 patent), 5,276,789 (the '789 patent), and 5,296,936 (the '936 patent).

7. The PCT Application proceeded directly to the International Preliminary Examination Report (IPER) stage, wherein the International Preliminary Examining Authority determined, independently of Applicant, that none of the references were particularly relevant and that all the claims were patentable. A copy of the IPER is enclosed for the Commissioner's convenience.

8. Each of the prior art references uncovered by both Applicant and the International Searching Authority have been submitted with Information Disclosure Statements in the subject application. Applicant has also included a copy of the '594 patent, the '789 patent and the '936 patent for the Commissioner's convenience. It is therefore respectfully submitted that section MPEP 708.02(VIII)(D) is satisfied.

9. In accordance with MPEP 708.02 (VIII)(E), a detailed discussion of the most pertinent references, which points out how the claimed subject matter is patentable over the references, is as follows.

10. The '594 patent discloses a digital computer 20 having one or more central processing units (CPU's) 22, one or more composite memory and input/output modules (MIO's) 24 and one or more interprocessor buffers (IPB's) 32 (see Figure 1). A bus 26 interconnects the MIO's 24 and IPB's 32 to the CPU 22. The MIO's 24 communicate with one or more external devices 31 through ports 28 or channels 30. Data is transferred to and from each MIO 24 and the CPU 22 through the bus 26 during a three phase clock cycle, which takes 1.5 microseconds. Figures 6A - 6C illustrate this three phase operation. Thus, during phase one, the CPU 22 has access to the MIO 24 through the bus 26 (see Figure 6A). During phase two, the channel 30 has access to the MIO 24, see Figure 6B, and during phase three, the port 28 has access to the MIO 24, see Figure 6C. This is how the invention of the '594 patent attempts to

overcome some deficiencies in conventional architectures, such as slow performance, interruptions of the CPU, or lack of access to data. This solution is significantly different than that of the subject invention and the '594 patent does not disclose the unique architecture or the unique method of communicating as set forth in Applicant's patent application.

11. The '594 patent does not disclose or suggest a method of communicating across an operating system comprising the steps of: extracting an initial process address and an initial data address from memory sources; executing executable code of the initial process; and extracting a second process address from one of the memory sources to determine a location of a second process to execute prior to the completion of the execution of the executable code of the initial process.

12. The '789 patent discloses a computer system 100 that automatically lays out and graphically displays architectures of various network systems. In particular, the computer system 100 contains a processing element 102 which communicates with other elements in the system 100 over a bus 104. Figure 4 illustrates an example of a network system having a star segment 304 with a hub 402 interconnecting a plurality of nodes 404. The '789 patent also discloses a number of other different architectures in Figures 2, 3, and 5. The invention of the '789 patent is primarily concerned with determining how to display these network architectures and how to update the displays. For example, Figure 19 discusses what to do if the architecture is a star configuration. The '789 patent, however, does not disclose or suggest in any way the architecture of the subject invention or the method of communication in which the subject invention operates.

13. The '789 patent in no way discloses or suggests a method of communicating across an operating system using a plurality of processes and a plurality of memory sources disposed within one or more processors including the steps of: extracting an initial process address and an initial data address from one of the memory sources; executing executable code of the initial process; and extracting a second process address from one of the memory sources to determine a location of a second

process to execute prior to the completion of the execution of the executable code of the initial process.

14. The '936 patent discloses a high-speed communication network 10 utilizing a High-Performance Parallel Interface (HPPI), which is also referred to as a HPPI Daisy Chain. A plurality of workstations 18 are connected to the HPPI Daisy Chain. The workstations 18 have receiver ports 14b and output ports 20. The workstations 18 are coupled together such that the workstations 18 are driven by data and control signals from upstream workstations 18 or servers 12 in the network. The workstations 18 rely on handshaking signals from the output ports 20 to ripple upstream to the server 12 or to an upstream workstation 18. As such, each workstations 18 must wait for instructions from another workstation 18 or server 12 before operating. The handshaking signals include a header burst which indicates information about the relevant data. Specifically, the header burst may include a bid address of a workstation 18 and control words to indicate specific packet information. Although the '936 patent discusses communicating between workstations 18, the '936 patent does not disclose the unique architecture of the subject invention or the unique method of communication as set forth in the independent claims of Applicant's patent application.

15. The '936 patent does not disclose or suggest a method of communicating across an operating system comprising the steps of: extracting an initial process address and an initial data address from one of the memory sources; executing executable code of the initial process; and extracting a second process address from one of the memory sources to determine a location of a second process to execute prior to the completion of the execution of the executable code of the initial process.

16. Neither the '594 patent, the '789 patent, nor the '936 patent disclose each and every step of the subject invention as set forth in independent Claims 1 and 35 of Applicant's patent application. In particular, neither the '594 patent, the '789 patent, nor the '936 patent disclose a unique and novel method of communicating across an operating system using a plurality of processes and a plurality of memory sources disposed within one or more processors. The method includes the steps of

detecting an event within the system; extracting an initial process address from one of the memory sources to determine a location of an initial process in response to detecting the event; extracting an initial data address from one of the memory sources to determine a location of initial data to be used in the initial process in response to detecting the event; and executing executable code of the initial process. The method further includes the step of extracting a second process address from one of the memory sources to determine a location of a second process to execute prior to the completion of the execution of the executable code of the initial process.

17. The International Preliminary Examining Authority, as stated in their International Preliminary Examination Report (IPER), concurs with Applicant's determination that the prior art does not disclose the specific method steps outlined above. In other words, the International Preliminary Examining Authority states that Claims 1-35 of the subject application meet the criteria set out in PCT Article 33(2)-(4) such that these claims are novel, include an inventive step, and meet the requirements for industrial applicability (see page 3 of the IPER).

18. The remaining references cited by both Applicant and the International Searching Authority of the PCT likewise fail to disclose each and every method step of the subject invention as claimed.

19. Therefore, Applicant respectfully submits that the subject invention, as claimed in independent Claims 1 and 35, is not anticipated by any of the cited prior art patents.

20. Additionally, any combination of the cited prior art references does not include each and every element of the subject method as recited in independent Claims 1 and 35. Hence, Applicant submits that independent Claims 1 and 35 are not obvious in light of the cited prior art patents.

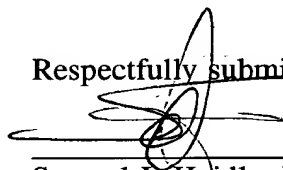
21. The remaining claims, namely Claims 2-34, each depend upon the novel features of Claim 1 such that these claims are also deemed unique and non-obvious in light of the cited prior art patents.

22. Applicant submits that all claims are directed to a single invention or if the office determines that the claims presented are not obviously directed to a single

invention, applicant agrees to make an election without traverse, as required by MPEP 708.02(VIII)(B).

23. I further declare that all statements made herein of my own personal knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced Application or any patent issuing thereon.

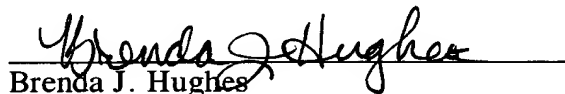
Respectfully submitted,



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**CERTIFICATE OF MAILING**

I hereby certify that the enclosed **Substitute Declaration of Samuel J. Haidle** is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to the **Assistant Commissioner for Patents, Washington, DC 20231**, on this **14th** day of **March, 2003**.

  
Brenda J. Hughes